

Product datasheet for **RC239687**

SECISBP2 (NM_001282688) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SECISBP2 (NM_001282688) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SECISBP2
Synonyms:	SBP2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC239687 representing NM_001282688
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGTCGGAGGGGCCGCGGGAGCCGAAAGCGAGGGCATCAAGTTATCAGCAGATGTCAAACCATTTG
 TCCCAGATTTGCCGGCTCAATGTGGCATGGTTAGAGTCTCAGAAGCATGTGTCTTCCCAGCTCTGC
 AGCCACATACTATCCGTTTGTTCAGGAACCACCACTGACAGAGCAGAAAAATATACTGAAGACATGGCC
 TTTGGAGCTTCAACTTTTCCACCTCAGTATTTATCTTCTGAGATAACTCTTCATCCATATGCCTATTCTC
 CTTATACCCTTGACTCCACACAGAATGTTTACTCAGTGCCTGGCTCCCAGTATCTTTATAACCAACCCAG
 TTGTTACCGAGGTTTTCAAACAGTGAAGCATCGAAATGAGAACACATGCCCTCTCCACAAGAAATGAAA
 GCTCTGTTAAGAAAACCTATGATGAGAAAAAACGTATGATCAGCAAAAGTTTGACAGTGAAGGGCTG
 ATGGAACATATCATCTGAGATAAAATCAGCTAGAGGTTACATCATTGTCCATTTACGCTGAGAATAG
 TTTGAAATCAGATGGTTACCATAAGCGAACAGACAGGAAATCCAGAATCATTGCAAAAAATGTATCTACC
 TCCAAACCTGAGTTTGAATTTACCACACTGGACTTTCCTGAACTGCAAGGTGCAGAGAACAATATGTCAG
 AGATACAGAAGCAACCCAAGTGGGGACCTGTCCACTCTGTCTCTACCGACATTTCTTTCTAAGAGAAGT
 AGTAAAACAGCTGCAGTGTTATCAAAGGGTGAATAGTGGTGAATAAACCAGAAATGAATCTGTAACCT
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 GACAGACATTATCTACAGAACTGTCAGCAGCCCTAAAAATGTTACTTCTATGATAAACTTAAAGACCAT
 TGCTTCATCAGCAGATCCTAAAAATGTTAGTATACCATCTTCTGAAGCTTATCTTCCGATCCTTCTAC
 AACAAAGAAAAACACATTATTCATCTACCCAAAAGTCTAAAGCATCACAAAGTAGTAGCTTGAACAAA
 ATGAAGCCTCAAGAAAGAATAAGAAAAAGAAAAAATCTACATCAAAATATGAAGCTCCGACGTTCA
 AGAGCCTCAAGGATTGAAGATGCCGAGGAATTTCCCAACCTGGCAGTTGCATCTGAAAGAAGAGACAGA
 ATAGAGACACCGAAATTTCAATCTAAGCAGCAGCCACAGGATAATTTTAAAAATAATGTAAGAAGAGCC
 AGCTTCCAGTGCAGTTGGACTTGGGGGGCATGCTGACAGCCCTGGAGAAGAAGCAGCACTCTCAGCATGC
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 GGGGAGAGAGGCCCGCATGAGTCAAATGAAGACCCCGACAATCCCTTGGACTCCAGCGCCCACTGA
 TGAAGAAAGGGAAGCAGAGGGAGATCCCAAGGCCAAGAAGCCAACTCACTGAAGAAGATTATTTTGA
 AGAACGGCAAGAGAGAAAGCAGCGTCTCCAAGAAAATGCTGTGAGTCCAGCTTTTACCAGTGATGACACA
 CAAGATGGAGAGAGTGGTGGTAGTACCAGTTTCCCGAGCAGGCAGAGCTGTGAGGGCCAGAGGGGATGG
 ACGAACTGATCTCCACTCCTTCGGTTGAGGACAAGTCTGAAGAGCCACCAGGCACAGAGCTCCAGAGGGA
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 GGAGGTTCTCAAACACCTGAAGCTCAAAAAACTGAAATGTGTCTATTATTTCTCCCACTGTGAGAAGATA
 CAGTCAAAGGTGGGCTGGATGACACTTGCACACAATTATTGATTATGCCTGTGAGCAGAACATTCCT
 TTGTGTTTGTCTCAACCGCAAAGCTCTGGGGCGCAGTTTGAATAAGGCAGTTCCTGTGAGTGGTGGG
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 GGTACAAGACCATGCTGGAGAATGTGCAGCAGGAGCTGGTGGGAGAGCCAGGCCTCAGGCACCTCCCA
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 ACACTACATTGAAATCTGAAAAAACATCTGGAAGCATACAGTGGATGTACCCTGGAGCTAGAAGAATCC
 TTGGAGGCTTCAACCTCTCAATGATGAATTTGAATTTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239687 representing NM_001282688
Red=Cloning site Green=Tags(s)

MASEGPREPESEGIKLSADV KPFVPRFAGLNVAWLESSEACVFPSSAATYYPFVQEPPVTEQKIYTEDMA
FGASTFPPQYLSEITLHPYAYSPTLDSTQNVYSVPGSQLYNQPSYRGFQTVKHRNENTCPLPQEMK
ALFKKTYDEKKT YDQKFD SERADGTISSEIKSARGSHHLSIYAENSLKSDGYHKRTDRKSRIIAKNVST
SKPEFEFTTLDPELQGAENMSEIQKQPKWGPVHSVSTDISLLREVVKPAAVLSKGEIVVKNPNPESVT
ANAATNSPSCRELSWTPMGYVVRQTLSTELSAAPKNVTSMINLKTIASSADPKNVSIPSEALSSDPSY
NKEKHIHPTQKSKASQGS DLEQNEASRKNKKKKEKSTSKYEVLTVQEPPRIEDAEFPNLAVASERRDR
IETPKFQSKQPQDNFKNNVKKSQLPVQLDLGGMLTALEKKQHSQHAKQSSKPVVSVGAVPVLSEKAS
GERGRRMSQMKTPHNPLDSSAPLMKKGKQREIPKAKKPTSLKKIILKERQERKQRLQENAVSPAFTSDDT
QDGE SGGDDQFPEQAELSGPEGMDELSTPSVEDKSEPPGTELQRDTEASHLAPNHTTFPKIHSRRFRD
YCSQMLSKEVDACVTDLLKELVRFQDRMYQKDPVAKTKRRLVLGLREVLKHLKLLKLCV IISPNCEKI
QSKGGLDDTLHTIIDYACEQNIPFVFALNRKALGRSLNKAVPVS VVGIFSYDGAQDQFHKMVELTVAARQ
AYKTMLENVQQLVGEPRPQAPPSLPTQGPSCPAEDGPPALKEKEEPHYIEIWKKHLEAYSGCTLELEES
LEASTSQMMNLNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

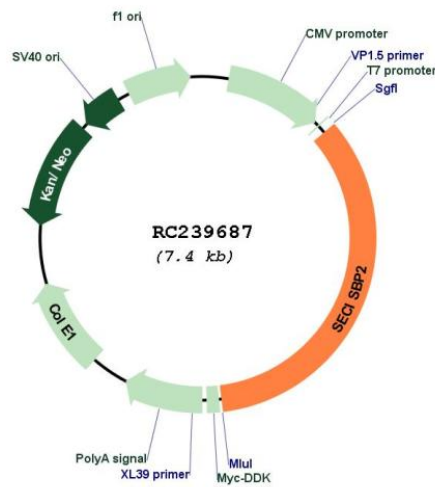
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN:	NM_001282688
ORF Size:	2559 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001282688.2
RefSeq Size:	3532 bp
RefSeq ORF:	2562 bp
Locus ID:	79048
UniProt ID:	Q96T21
Cytogenetics:	9q22.2
MW:	95.8 kDa
Gene Summary:	The protein encoded by this gene is one of the essential components of the machinery involved in co-translational insertion of selenocysteine (Sec) into selenoproteins. Sec is encoded by the UGA codon, which normally signals translation termination. The recoding of UGA as Sec codon requires a Sec insertion sequence (SECIS) element; present in the 3' untranslated regions of eukaryotic selenoprotein mRNAs. This protein specifically binds to the SECIS element, which is stimulated by a Sec-specific translation elongation factor. Mutations in this gene have been associated with reduction in enzymatic activity of type II iodothyronine deiodinase (a selenoprotein) and abnormal thyroid hormone metabolism. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Aug 2017]